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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,625	10/24/2003	Timothy Ray Locascio	104195-0008	1508
24267	7590	08/04/2005	EXAMINER	
CESARI AND MCKENNA, LLP 88 BLACK FALCON AVENUE BOSTON, MA 02210			LE, DANH C	
			ART UNIT	PAPER NUMBER
			2683	

DATE MAILED: 08/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/693,625

Applicant(s)

LOCASCIO ET AL.

Examiner

DANH C. LE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 22 is/are rejected.
- 7) ☒ Claim(s) 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Drawings*

1. The drawings were received on 3/25/04. These drawings are accepted by the examiner.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a):

2. **Claims 1-4, 7-10, 12-14, 16-20, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Malley US 2004/0174973 in view of Pickett (US 2003/0219029).**

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As to claim 1, O'Malley teaches in a converged services platform (figure 1), a media resources card (figure 2) comprising:

a central processing unit (48);

a plurality of digital signal processors (60-65), each of which has an associated DSP cache memory (80-85), coupled in communicating relationship with said CPU (48);  
and

a network interface (24, 32), coupled in communicating relationship with said CPU, through which said media resources card may communicate with a file server (34);

wherein said CPU and DSPS to provide services such as music play back and DTFM detection.

O'Malley fails to teach an associated CPU cache memory and a caching algorithm in which a cached file may be assigned at least one of a persistence level attribute and a timer expiration attribute. Pickett teaches an associated CPU cache memory and a caching algorithm in which a cached file may be assigned at least one of a persistence level attribute and a timer expiration attribute (figure 20, 426 and paragraph 0298). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Pickett into the system of O'Malley in order to make room for additional information in memory.

As to claim 2, the combination of O'Malley and Pickett teaches converged services platform as in claim 1, wherein said persistence level attribute includes

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programming for specifying how readily or not said cached file may be deleted from one or more of said cache memories (yy, paragraph 0298).

As to claim 3, the combination of O'Malley and Pickett teaches media resources card as in claim 2, wherein said persistence level may be assigned a value of "hard" denoting that said cached file is not to be removed from said cache memories (critical files).

As to claims 4, the combination of O'Malley and Pickett teaches media resources card as in claim 2, wherein said persistence level may be assigned a value of "hard" denoting that said cached file is a cached recording file, not to be removed from cache until said cached file is stored to a non-volatile storage medium ( Pickett, paragraph 0298).

As to claims 7, 9, 10, the combination of O'Malley and Pickett teaches media resources card media resources card. The combination fails to teach said persistence level may be assigned a value of "none" denoting that said cached file is to be removed from said cache memories for any reason, said timer expiration attribute overrides said persistence level attribute and an application program for setting said timer expiration attribute and said persistence level attribute of said cached files on a per file basis. However, the examiner takes Official Notice that the recited limitations are known in the art the designer want to retain certain information in the memory as Pickett suggested on paragraph 0298.

As to claims 8, the combination of O'Malley and Pickett teaches converged services platform as in claim 1, wherein said expiration time attribute includes

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programming for specifying a time period after which said cached file may be deleted from one or more of said cache memories (paragraph 0298).

As to claim 11, the claim is a method claim of claim 1; therefore, the claim is interpreted and rejected as set forth as claim 1.

As to claim 12, the claim is a method claim of claim 2; therefore, the claim is interpreted and rejected as set forth as claim 2.

As to claim 13, the claim is a method claim of claim 3; therefore, the claim is interpreted and rejected as set forth as claim 3.

As to claim 14, the claim is a method claim of claim 4; therefore, the claim is interpreted and rejected as set forth as claim 4.

As to claim 17, the claim is a method claim of claim 7; therefore, the claim is interpreted and rejected as set forth as claim 7.

As to claim 18, the claim is a method claim of claim 8; therefore, the claim is interpreted and rejected as set forth as claim 8.

As to claim 19, the claim is a method claim of claim 9; therefore, the claim is interpreted and rejected as set forth as claim 9.

As to claim 20, the claim is a method claim of claim 10; therefore, the claim is interpreted and rejected as set forth as claim 10.

As to claim 22, O'Malley teaches in a converged services platform (figure 1), a media resources card (figure 2) comprising:

a central processing unit (48);

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a plurality of digital signal processors (60-65), one of said DSPS being assigned for playback of a requested file (figure 4);

means for executing a caching algorithm for said requested file, said caching algorithm resulting in a cached file stored on a cache memory of at least one of said CPU and said DSPS (figure 4); and

O'Malley fails to teach means for assigning at least one of a persistence level attribute and a timer expiration attribute to said cached file. Pickett teaches means for assigning at least one of a persistence level attribute and a timer expiration attribute to said cached file (paragraph 0298). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Pickett into the system of O'Malley in order to make room for additional information in memory.

**3. Claims 5, 6, 11, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Malley US 2004/0174973) and Pickett (US 2003/0219029) in view of Dye (US 6,879,266).**

As to claim 5, the combination of O'Malley and Pickett teaches media resources card as in claim 2, wherein said persistence level may be assigned a value of "soft" denoting that said cached file is to remain in said cache memories (retained certain level of information). The combination O'Malley and Pickett fails to teach a Most Recently Used (LRU) algorithm removes it. Dye teaches a Most Recently Used (LRU) algorithm removes it (col.48, lines 65-col.49, line 12). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide

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the teaching of Dye into the system of O'Malley and Pickett in order to make room for additional information in memory.

As to claim 15, the claim is a method claim of claim 5; therefore, the claim is interpreted and rejected as set forth as claim 5.

As to claim 5, the combination of O'Malley and Pickett teaches media resources card media resources card as in claim 5, wherein said persistence level may be assigned a value of "firm" denoting that said cached file is to remain in said cache memories until after substantially all "soft" cached files have been removed (retained certain level of information. O'Malley and Pickett fails to teach cached files also being removed then by an LRU algorithm. Dye teaches cached files also being removed then by an LRU algorithm (col.48, lines 65-col.49, line 12). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Dye into the system of O'Malley and Pickett in order to make room for additional information in memory.

As to claim 11, the claim is a method claim of claim 1; therefore, the claim is interpreted and rejected as set forth as claim 1.

***Allowable Subject Matter***

4. Claim 21 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claim 21, the teaching of prior arts either alone or in combination fails to teach the step of executing a caching algorithm further comprises the steps of



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determining whether or not said requested file is contained within a cache memory of said converged services platform, in response to a file not contained within a cache memory of said converged services platform, retrieving, at said CPU, said requested file from an associated file Server, caching said requested file in a cache memory of at least one of said CPU and said assigned playback DSP; in response to a file contained within said cache memory of said assigned playback DSP: performing a playback of said file from said cache memory of said assigned playback DSP. In response to a file contained within said cache memory of said converged services platform, but not contained within said cache memory of said assigned playback DSP and caching said file to said cache memory of said assigned playback DSP contemporaneously with playback of said file from said cache memory of said converged services platform containing said file.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

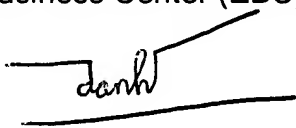
- A. Tamai et al (US 2004/0190183) teaches disk array device.
- B. Dubois et al (US 2002/01544646) teaches programmable network services node.
- C. West et al (US 2002/0016899) teaches demand usable adapter memory access management.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANH C. LE whose telephone number is 571-272-7868. The examiner can normally be reached on 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WILLIAM TROST can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "danh", is written over a horizontal line.

July 29, 2005.

DANH CONG LE  
PATENT EXAMINER